

Stefan Martin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2576459/publications.pdf>

Version: 2024-02-01

54
papers

1,418
citations

331538

21
h-index

360920

35
g-index

54
all docs

54
docs citations

54
times ranked

756
citing authors

#	ARTICLE	IF	CITATIONS
1	Deformation behaviour of TWIP steels: Constitutive modelling informed by local and integral experimental methods used in concert. <i>Materials Characterization</i> , 2022, 184, 111667.	1.9	9
2	Effect of Cu on Nitriding of γ -Fe. <i>Metals</i> , 2022, 12, 619.	1.0	2
3	Domain structure of pseudosymmetric γ - ϵ -ordered Cu ₆ Sn ₅ by EBSD analysis. <i>Acta Materialia</i> , 2022, 229, 117828.	3.8	6
4	Nanoscale twinning in Fe-Mn-Al-Ni martensite: a backscatter Kikuchi diffraction study. <i>Journal of Applied Crystallography</i> , 2021, 54, 54-61.	1.9	8
5	Competition of mechanisms contributing to the texture formation in metastable austenitic steel under compressive load. <i>Materials Characterization</i> , 2021, 176, 111132.	1.9	5
6	Stable and Metastable Phase Equilibria Involving the Cu ₆ Sn ₅ Intermetallic. <i>Journal of Electronic Materials</i> , 2021, 50, 5898-5914.	1.0	6
7	Preparation of CoGe ₂ -type NiSn ₂ at 10 ⁴ GPa. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2021, .	0.3	0
8	Processing of 17Cr7Mn6Ni TRIP Steel Powder by Extrusion at Room Temperature and Pressureless Sintering. <i>Advanced Engineering Materials</i> , 2020, 22, 2000019.	1.6	5
9	An orthorhombic D022-like precursor to Al ₈ Mo ₃ in the Al-Mo-Ti system. <i>Journal of Alloys and Compounds</i> , 2020, 823, 153807.	2.8	7
10	Forming Complex Graded and Homogeneous Components by Joining Simple Presintered Parts of TRIP-Matrix Composite through Powder Forging. <i>Metals</i> , 2020, 10, 543.	1.0	3
11	Microstructure Aspects of the Deformation Mechanisms in Metastable Austenitic Steels. <i>Springer Series in Materials Science</i> , 2020, , 325-377.	0.4	5
12	Quality of dissimilar welded particle-reinforced TRIP/TWIP steels generated by electron beam braze-welding. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2019, 63, 1655-1667.	1.3	1
13	Deformation Mechanisms in Metastable Austenitic TRIP/TWIP Steels under Compressive Load Studied by <i>in situ</i> Synchrotron Radiation Diffraction. <i>Advanced Engineering Materials</i> , 2019, 21, 1801101.	1.6	25
14	Cyclic Degradation Behavior of $\langle 001 \rangle$ -Oriented Fe-Mn-Al-Ni Single Crystals in Tension. <i>Shape Memory and Superelasticity</i> , 2017, 3, 335-346.	1.1	22
15	The crystal structure of (Nb _{0.75} Cu _{0.25})Sn ₂ in the Cu-Nb-Sn system. <i>Intermetallics</i> , 2017, 80, 16-21.	1.8	16
16	Casting of Fe-CrMnNi and ZrO ₂ -Based Metal-Matrix Composites and Their Wear Properties. <i>Steel Research International</i> , 2016, 87, 1111-1117.	1.0	6
17	Deformation Mechanisms in Austenitic TRIP/TWIP Steel as a Function of Temperature. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 49-58.	1.1	211
18	Interplay of microstructure defects in austenitic steel with medium stacking fault energy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 649, 390-399.	2.6	51

#	ARTICLE	IF	CITATIONS
19	Investigation of Phase Transformations in High-Alloy Austenitic TRIP Steel Under High Pressure (up to) Tj ETQq1 1 0.784314 rgBT /Over Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 95-111.	1.1	27
20	Influence of Powder Particle Size on the Compaction Behavior and Mechanical Properties of a High-Alloy Austenitic CrMnNi TRIP Steel During Spark Plasma Sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 170-177.	1.1	13
21	Deformation Bands in High-Alloy Austenitic 16Cr6Mn6Ni TRIP Steel: Phase Transformation and Its Consequences on Strain Hardening at Room Temperature. Steel Research International, 2015, 86, 1187-1196.	1.0	61
22	Deformation of Austenitic CrMnNi TRIP/TWIP Steels: Nature and Role of the Éâ’ martensite. Materials Today: Proceedings, 2015, 2, S643-S646.	0.9	52
23	Orientation Dependence of the Martensitic Transformation in (Zr,Mg)O2 Embedded in a TRIP Steel Matrix. Materials Today: Proceedings, 2015, 2, S727-S730.	0.9	0
24	Thermal Stability of the Commercial Mgâ€PSZ Powders. Advanced Engineering Materials, 2015, 17, 1323-1331.	1.6	5
25	Prediction of the local deformation mechanisms in metastable austenitic steels from the local concentration of the main alloying elements. Materials Letters, 2015, 159, 484-488.	1.3	32
26	Constitutive modelling of the rate dependent flow stress of cast high-alloyed metastable austenitic TRIP/TWIP steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 72-81.	2.6	43
27	Assessment of the thermodynamic dimension of the stacking fault energy. Philosophical Magazine, 2014, 94, 2967-2979.	0.7	22
28	Stacking fault energy in austenitic steels determined by using <i>in situ</i> X-ray diffraction during bending. Journal of Applied Crystallography, 2014, 47, 936-947.	1.9	69
29	Orientation relationships between phases arising during compression testing in ZrO2â€TRIP-steel composites. Journal of Alloys and Compounds, 2013, 577, S578-S582.	2.8	16
30	Microstructure Changes in <sc>TRIP</sc> Steel/<sc>M</sc>gâ€<sc>PSZ</sc> Composites Induced by Low Compressive Deformation. Advanced Engineering Materials, 2013, 15, 600-608.	1.6	17
31	Microstructural and fracture toughness characterisation of a high-strength FeCrMoVC alloy manufactured by rapid solidification. Engineering Fracture Mechanics, 2013, 99, 278-294.	2.0	8
32	Microstructure Defects Contributing to the Energy Absorption in Cr<sc>M</sc>n<sc>N</sc>i<sc>TRIP</sc> Steels. Advanced Engineering Materials, 2013, 15, 571-582.	1.6	35
33	Fatigue crack propagation and in-situ observations in three tool steel alloys manufactured using a rapid solidification technique. Journal of Materials Science, 2013, 48, 5324-5333.	1.7	1
34	Interface Phenomena Responsible for Bonding between <sc>TRIP</sc> Steel and Partially Stabilised Zirconia as Revealed by TEM. Advanced Engineering Materials, 2013, 15, 627-637.	1.6	3
35	Pitfalls of local and quantitative phase analysis in partially stabilized zirconia. Journal of Applied Crystallography, 2012, 45, 1136-1144.	1.9	23
36	High Strain-Rate Behavior and Transformation-Induced Plasticity of a High-Strength FeCrMoVWC Alloy Manufactured by Rapid Solidification Technique. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3642-3653.	1.1	5

#	ARTICLE	IF	CITATIONS
37	Strain-Rate-Dependent Flow Stress and Failure of an Mg-PSZ Reinforced TRIP Matrix Composite Produced by Spark Plasma Sintering. Steel Research International, 2012, 83, 521-528.	1.0	29
38	Cyclic Deformation of Powder Metallurgy Stainless Steel/Mg-PSZ Composite Materials. Steel Research International, 2012, 83, 554-564.	1.0	20
39	Mechanical Behavior of Deformation-Induced ϵ -Martensite and Flow Curve Modeling of a Cast CrMnNi TRIP-Steel. Steel Research International, 2012, 83, 529-537.	1.0	23
40	High strain rate behavior, transformation-induced plasticity and fracture toughness characterization of cast and additionally tempered Fe85Cr4Mo8V2C1 alloy manufactured using a rapid solidification technique. Journal of Materials Science, 2012, 47, 6915-6928.	1.7	3
41	Microstructure of austenitic stainless steels of various phase stabilities after cyclic and tensile deformation. International Journal of Materials Research, 2011, 102, 1374-1377.	0.1	14
42	Stacking faults in high-alloyed metastable austenitic cast steel observed by electron channelling contrast imaging. Scripta Materialia, 2011, 64, 513-516.	2.6	89
43	Stacking fault model of ϵ -martensite and its implementation. Journal of Applied Crystallography, 2011, 44, 779-787.	1.9	100
44	Strain Rate Dependent Flow Stress and Energy Absorption Behaviour of Cast CrMnNi TRIP/TWIP Steels. Steel Research International, 2011, 82, 1087-1093.	1.0	46
45	Strength and Failure Behaviour of Spark Plasma Sintered Steel-Zirconia Composites Under Compressive Loading. Steel Research International, 2011, 82, 1017-1021.	1.0	23
46	Reinforcing Mechanism of Mg-PSZ Particles in Highly-Alloyed TRIP Steel. Steel Research International, 2011, 82, 1133-1140.	1.0	77
47	Texture evolution during tensile necking of copper processed by equal channel angular extrusion. Journal of Physics: Conference Series, 2010, 240, 012161.	0.3	1
48	Cellular Energy Absorbing TRIP-Steel/Mg-PSZ Composite: Honeycomb Structures Fabricated by a New Extrusion Powder Technology. Advances in Materials Science and Engineering, 2010, 2010, 1-6.	1.0	13
49	The influence of martensitic transformation on mechanical properties of cast high alloyed CrMnNi-steel under various strain rates and temperatures. Journal of Physics: Conference Series, 2010, 240, 012098.	0.3	27
50	Microstructure and mechanical properties of cold extruded, cellular TRIP-matrix composite structures under quasi-static and dynamic compression. , 2010, , .		4
51	Werkstoffverhalten einer TRIP/TWIP-fähigen CrMnNi-Stahlgusslegierung bis zu hohen Dehnraten*. Materialpruefung/Materials Testing, 2010, 52, 588-595.	0.8	7
52	Mechanical properties of high alloyed cast and rolled CrMnNi TRIP steels with varying Ni contents. , 2009, , .		28
53	Investigations on martensite formation in CrMnNi-TRIP steels. , 2009, , .		29
54	Influence of Temperature on Phase Transformation and Deformation Mechanisms of Cast CrMnNi-TRIP/TWIP Steel. Solid State Phenomena, 0, 172-174, 172-177.	0.3	65